Patent Claims

- Arrangement for measuring a fill level of a medium
 (58) in a tank (50) equipped with a sounding tube (12), by means of a fill level measuring device (18), which works with microwave signals, characterized in that the arrangement (10) includes a deflecting device (24; 26) for deflecting microwave signals in an end region (22) of the sounding tube (12).
 - 2. Arrangement as claimed in claim 1, characterized in that the deflecting device (24; 26) includes a deflecting plate (24).

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- 3. Arrangement as claimed in one of the claims 1 or 2, characterized in that the deflecting device (24; 26) is secured within the sounding tube (12).
- 4. Arrangement as claimed in one of the claims 1 or 2, characterized in that the deflecting device (24; 26) is secured externally on the deflecting tube (12).
- 5. Arrangement as claimed in one of the claims 1 to 4, characterized in that the deflecting device (24; 26) is arranged at a predetermined angle to a longitudinal axis of the sounding tube (12).
- 6. Arrangement as claimed in one of the claims 1 to 5, 30 characterized in that the deflecting device (24; 26) is an angular plate (26).
 - 7. Arrangement as claimed in one of the claims 1 to 6, characterized in that the fill level measuring device

- (18) includes a horn antenna, which protrudes into the sounding tube (12).
- 8. Arrangement as claimed in one of the claims 1 to 6, characterized in that, in the sounding tube (12), a Y-adapter (20) is provided for a plumb device and that, in the region of the deflecting device (24; 26), a microwave-transmissive support (32; 34) is provided for the plumb device.

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9. Use of the arrangement (10) as claimed in one of the preceding claims 1 to 8 in a tank (50) of a ship.